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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,472	06/14/2001	Ramandeep S. Sawhney	303.729US1	7503

21186 7590 02/04/2003

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EXAMINER

PHAM, LY D

ART UNIT PAPER NUMBER

2818

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,472

Applicant(s)

SAWHNEY, RAMANDEEP S.

Examiner

Ly D Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) 1-42 and 55-88 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-45 and 47-54 is/are rejected.
- 7) ☐ Claim(s) 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

FINAL ACTION

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 43 – 54 in Paper No. 5 is acknowledged.
2. Claims 1 – 42 and 55 – 69 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.
3. Newly submitted claims 70 – 85 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons:

Claim 70 adds a memory array, a plurality of sense amplifiers and an isolation gate...

Claims 71 – 74 add an input adapted to receive a row access signal and an output adapted to ..., wherein the timing circuit activates the address decoder based on a state of the row access signal and

Claims 75 – 78 add a second input adapted to receive a memory access control signal and an output adapted to activate/deactivate a wordline decoder based on the first input and the second input.

Claims 79 – 84 add a delay circuit ...; a first input ...; a second input ...; and an output ..., wherein the timing circuit activates

Claims 85 – 88 add a second input ...; and a timing output

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 70 – 88 are withdrawn from consideration as being directed to non-elected inventions. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 43 – 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (US Pat 5,392,241) in view of Uruma et al. (US Pat 5,313,431).

Regarding **claims 43 and 49**, Butler et al. disclose a timing circuit, comprising: an input adapted to receive at least one input signal (col. 7, lines 12 – 15), which includes a sense amplifier isolation signal (fig. 1 or 4, 16, col. 4, lines 3 – 9); and an output connected to an address decoder (col. 7, lines 15 – 24: Also output from address decoder 82 are word line address signal...), wherein the timing circuit activates the address decoder based on the at least one input signal (col. 7, lines 12 – 24).

It is obvious, although not expressly stated as such, the sense amp timing chain 80, upon receiving an input, causes activation of the address decoder... “Sense amplifier timing chain 80 also receives input from an address decode

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circuit 82, which itself is controlled by row/column addresses received from controller 74. Timing chain 80 outputs the SETBL and BLKSET signals... Also output from address decoder 82 are word line address signal `WL` and write switching signal `Y`. An I/O interface 84 receives/transmits data between memory circuit 72 and controller 74.... It is the controller, being part of the timing chain, receives/transmits data through I/O interface. And as cited, from address decoder is where I/O interface connected to.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to implement the claimed invention from the view point of Butler et al. to enhance block overwrite capabilities of memory (col. 7, lines 18 – 20: One of ordinary skill of in the art can readily implement a timing chain to provide these signals, which are depicted and described herein. Col. 1, lines 6 – 10).

Regarding claims 44 – 45, 47 – 48, and 50 – 53, the Examiner takes an Official Notice that the limitations claimed in these claims are considered common and well known in the memory art.

5. Claims 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al. (US Pat 5,392,241) in view of Uruma et al. (US Pat 5,313,431).

Although Butler et al. did not claim the feature disclosed in claim 54, it is shown by Uruma et al. (fig. 3, sense amp circuit 23 is shared among the memory cell arrays 9l and 9u).

Therefore, it is considered obvious to one skilled in the art, at the time the invention was made, to incorporate this feature entailed by Uruma et al. to the invention of Butler et al., for isolating memory array (col. 15, lines 4 – 7).

Allowable Subject Matter

6. Claim 46 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is also strongly urged to look over the enclosed cited prior arts for relevance to the claim limitations.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. When responding to the office action, Applicant(s) are advised to provide the examiner with the page and line numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

10. Any inquiry concerning this communication on earlier communications from the examiner should be directed to Ly Pham, whose telephone number is 703-305-4862. The examiner can normally be reached on Monday – Friday from 8:30am to 5:00pm, alternate Friday off. The examiner's supervisor, David Nelms, can be reached at 703-308-4910. The fax number for the organization where this application or proceeding is assigned is 703-308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Ly Pham



January 19, 2003



David Nelms
Supervisory Patent Examiner
Technology Center 2800